

## PATENT COOPERATION TREATY

PCT

NOTIFICATION OF THE RECORDING  
OF A CHANGE(PCT Rule 92bis.1 and  
Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

To:

HAN-YANG PATENT FIRM  
10th Floor, Dacom Building  
706-1 Yeoksam-dong  
Gangnam-gu  
Seoul 135-987  
RÉPUBLIQUE DE CORÉE

Date of mailing (day/month/year) 02 October 2001 (02.10.01)	IMPORTANT NOTIFICATION
Applicant's or agent's file reference P00PC035/PCT	
International application No. PCT/KR01/00072	International filing date (day/month/year) 17 January 2001 (17.01.01)

## 1. The following indications appeared on record concerning:

☐ the applicant    ☐ the inventor    ☒ the agent    ☐ the common representative

Name and Address SHINSUNG PATENT FIRM Haecheon Bldg., 741-40, Yeoksam 1-dong, Kangnam-ku Seoul 135-081 Republic of Korea	State of Nationality	State of Residence
	Telephone No. 82-2-555-7503	
	Facsimile No. 82-2-553-1450	
	Teleprinter No.	

## 2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

☐ the person    ☒ the name    ☒ the address    ☐ the nationality    ☐ the residence

Name and Address HAN-YANG PATENT FIRM 10th Floor, Dacom Building 706-1 Yeoksam-dong Gangnam-gu Seoul 135-987 Republic of Korea	State of Nationality	State of Residence
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	

## 3. Further observations, if necessary:

## 4. A copy of this notification has been sent to:

<input checked="" type="checkbox"/> the receiving Office	<input checked="" type="checkbox"/> the designated Offices concerned
<input checked="" type="checkbox"/> the International Searching Authority	<input type="checkbox"/> the elected Offices concerned
<input type="checkbox"/> the International Preliminary Examining Authority	<input type="checkbox"/> other:

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer  Dominique DELMAS
Facsimile No.: (41-22) 740.14.35	Telephone No.: (41-22) 338.83.38

## PATENT COOPERATION TREATY

PCT

NOTIFICATION OF THE RECORDING  
OF A CHANGE(PCT Rule 92bis.1 and  
Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

To:

HAN-YANG PATENT FIRM  
10th Floor, Dacom Building  
706-1 Yeoksam-dong  
Gangnam-gu  
Seoul 136-987  
RÉPUBLIQUE DE CORÉE

Date of mailing (day/month/year)

02 October 2001 (02.10.01)

Applicant's or agent's file reference

POOPC035/PCT

## IMPORTANT NOTIFICATION

International application No.

PCT/KR01/00072

International filing date (day/month/year)

17 January 2001 (17.01.01)

## 1. The following indications appeared on record concerning:

☒ the applicant ☐ the inventor ☐ the agent ☐ the common representative

Name and Address

EGC & C CO., LTD.  
#1407 Mijin Plaza Bldg.  
825, Yeoksam 1-dong  
Kangnam-ku  
Seoul 136-081  
Republic of Korea

State of Nationality

KR

State of Residence

KR

Telephone No.

82-2-326-3782

Facsimile No.

Teleprinter No.

## 2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

☐ the person ☐ the name ☒ the address ☐ the nationality ☐ the residence

Name and Address

EGC & C CO., LTD.  
4th Floor Dongsung Building  
481-1 Mangwon-dong  
Mapo-gu  
Seoul 121-230  
Republic of Korea

State of Nationality

KR

State of Residence

KR

Telephone No.

82-2-326-3782

Facsimile No.

Teleprinter No.

## 3. Further observations, if necessary:

## 4. A copy of this notification has been sent to:

☒ the receiving Office ☒ the designated Offices concerned  
☒ the International Searching Authority ☐ the elected Offices concerned  
☐ the International Preliminary Examining Authority ☐ other:The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Authorized officer

D minique DELMAS

Facsimile No.: (41-22) 740.14.36

Telephone No.: (41-22) 338.83.38

## PATENT COOPERATION TREATY

PCT

NOTICE INFORMING THE APPLICANT OF THE  
COMMUNICATION OF THE INTERNATIONAL  
APPLICATION TO THE DESIGNATED OFFICES

(PCT Rule 47.1(c), first sentence)

From the INTERNATIONAL BUREAU

To:

SHINSUNG PATENT FIRM  
Haecheon Bldg., 741-40, Yeoksam 1-  
dong,  
Kangnam-ku  
Seoul 135-081  
RÉPUBLIQUE DE COREE

Date of mailing (day/month/year) 26 July 2001 (26.07.01)		
Applicant's or agent's file reference P00PC035/PCT		IMPORTANT NOTICE
International application No. PCT/KR01/00072	International filing date (day/month/year) 17 January 2001 (17.01.01)	Priority date (day/month/year) 17 January 2000 (17.01.00)
Applicant EGC & C CO., LTD. et al		

1. Notice is hereby given that the International Bureau has communicated, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this Notice:  
AU,KP,KR,US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present Notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:

AE,AG,AL,AM,AP,AT,AZ,BA,BB,BG,BR,BY,BZ,CA,CH,CN,CR,CU,CZ,DE,DK,DM,DZ,EA,EE,EP,ES,  
FI,GB,GD,GE,GH,GM,HR,HU,ID,IL,IN,IS,JP,KE,KG,KZ,LC,LK,LR,LS,LT,LU,LV,MA,MD,MG,MK,  
MN,MW,MX,MZ,NO,NZ,OA,PL,PT,RO,RU,SD,SE,SG,SI,SK,SL,TJ,TM,TR,TT,TZ,UA,UG,UZ,VN,YU,

The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).

3. Enclosed with this Notice is a copy of the international application as published by the International Bureau on  
26 July 2001 (26.07.01) under No. WO 01/53958

## REMINDER REGARDING CHAPTER II (Article 31(2)(a) and Rule 54.2)

If the applicant wishes to postpone entry into the national phase until 30 months (or later in some Offices) from the priority date, a demand for international preliminary examination must be filed with the competent International Preliminary Examining Authority before the expiration of 19 months from the priority date.

It is the applicant's sole responsibility to monitor the 19-month time limit.

Note that only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination.

## REMINDER REGARDING ENTRY INTO THE NATIONAL PHASE (Article 22 or 39(1))

If the applicant wishes to proceed with the international application in the national phase, he must, within 20 months or 30 months, or later in some Offices, perform the acts referred to therein before each designated or elected Office.

For further important information on the time limits and acts to be performed for entering the national phase, see the Annex to Form PCT/IB/301 (Notification of Receipt of Record Copy) and Volume II of the PCT Applicant's Guide.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer J. Zahra
Facsimile No. (41-22) 740.14.35	Telephone No. (41-22) 338.83.38

## P A T E N T C O O P E R A T I O N T R E A T Y

PCT

From the INTERNATIONAL BUREAU

NOTIFICATION CONCERNING  
SUBMISSION OR TRANSMITTAL  
OF PRIORITY DOCUMENT

(PCT Administrative Instructions, Section 411)

To:

SHINSUNG PATENT FIRM  
Haecheon Bldg., 741-40, Yeoksam 1-  
dong,  
Kangnam-ku  
Seoul 135-081  
RÉPUBLIQUE DE CORÉE

Date of mailing (day/month/year) 02 July 2001 (02.07.01)	
Applicant's or agent's file reference P00PC035/PCT	IMPORTANT NOTIFICATION
International application No. PCT/KR01/00072	International filing date (day/month/year) 17 January 2001 (17.01.01)
International publication date (day/month/year) Not yet published	Priority date (day/month/year) 17 January 2000 (17.01.00)
Applicant EGC & C CO., LTD. et al	

- The applicant is hereby notified of the date of receipt (except where the letters "NR" appear in the right-hand column) by the International Bureau of the priority document(s) relating to the earlier application(s) indicated below. Unless otherwise indicated by an asterisk appearing next to a date of receipt, or by the letters "NR", in the right-hand column, the priority document concerned was submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b).
- This updates and replaces any previously issued notification concerning submission or transmittal of priority documents.
- An asterisk(\*) appearing next to a date of receipt, in the right-hand column, denotes a priority document submitted or transmitted to the International Bureau but not in compliance with Rule 17.1(a) or (b). In such a case, the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.
- The letters "NR" appearing in the right-hand column denote a priority document which was not received by the International Bureau or which the applicant did not request the receiving Office to prepare and transmit to the International Bureau, as provided by Rule 17.1(a) or (b), respectively. In such a case, the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.

Priority date	Priority application No.	Country or regional Office or PCT receiving Office	Date of receipt of priority document
17 Janu 2000 (17.01.00)	2000/1953	KR	06 June 2001 (06.06.01)
26 Janu 2000 (26.01.00)	2000/3836	KR	05 June 2001 (06.06.01)

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Facsimile No. (41-22) 740.14.35

Authorized officer

Dominique DELMAS

Telephone No. (41-22) 338.83.38

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau(43) International Publication Date  
26 July 2001 (26.07.2001)

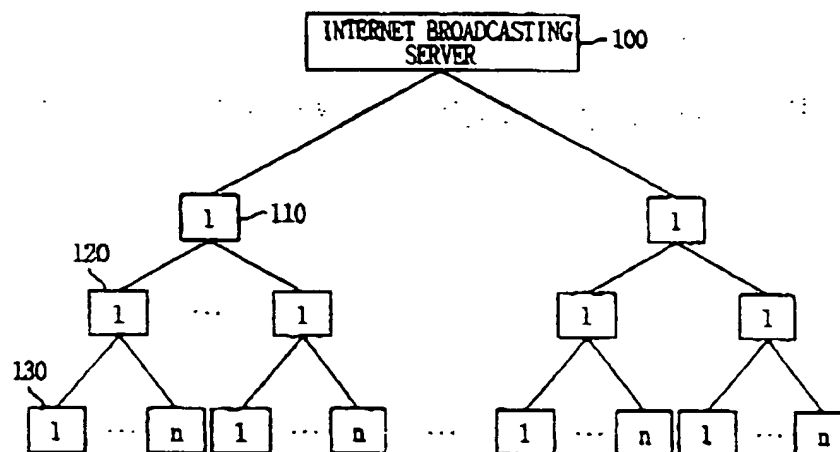
PCT

(10) International Publication Number  
WO 01/53958 A1

- (51) International Patent Classification: G06F 15/00, 17/00
- (21) International Application Number: PCT/KR01/00072
- (22) International Filing Date: 17 January 2001 (17.01.2001)
- (25) Filing Language: Korean
- (26) Publication Language: English
- (30) Priority Data:  
2000/1953 17 January 2000 (17.01.2000) KR  
2000/3836 26 January 2000 (26.01.2000) KR
- (71) Applicants (for all designated States except US): EGC & C CO., LTD. [KR/KR]; #1407 Mijin Plaza Bldg. 825, Yeoksam 1-dong, Kangnam-ku, Seoul 135-081 (KR). MIZI RESEARCH, INC. [KR/KR]; 2F Dongsan Bldg. 890-38 Daechi 4-dong, Kangnam-ku, Seoul 135-284 (KR).
- (72) Inventor: HWANG, Jun [KR/KR]; #1-501, Shiyong Apt., Jungkye-dong, Nowon-ku, Seoul 139-220 (KR).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): ZEE, Dae-Hoon [KR/KR]; 10-10, 30, Chung-dong, Dobong-ku, Seoul 132-091 (KR). KIM, Yong-Hwa [KR/KR]; 432-5 Byung-bang-dong, Kyeyang-ku, Incheon-shi 407-320 (KR).
- (74) Agent: SHINSUNG PATENT FIRM; Haecheon Bldg., 741-40, Yeoksam 1-dong, Kangnam-ku, Seoul 135-081 (KR).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

[Continued on next page]

(54) Title: SYSTEM AND METHOD FOR PROVIDING INTERNET BROADCASTING DATA BASED ON HIERARCHICAL STRUCTURE



(57) Abstract: A system and method for providing Internet broadcasting data based on hierarchical structure, which can reduce a bottleneck problem due to data congestion. The method for providing Internet broadcasting data includes the steps of: a) if a connection request signal is received from a first terminal, determining whether a number of terminals connected to a server is smaller than a threshold value; b) if the number of the terminals connected to the server is smaller than the threshold value, transmitting broadcasting data to the first terminal; and c) if the number of the terminals connected to the server is not smaller than the threshold value, leading the first terminal to try to connect a second terminal, wherein the second terminal is one of the terminals connected to the server.

WO 01/53958 A1

**WO 01/53958 A1**

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— with international search report

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

## INTERNATIONAL SEARCH REPORT

international application No.  
PCT/KR01/00072**A. CLASSIFICATION OF SUBJECT MATTER**

IPC7 G06F 15/00, G06F 17/00

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Λ	US-5983005 (Netcast Communications Corp.) November 9, 1999 * Abstract *	1 - 13
Λ	US-5991306 (Microsoft Corporation) November 23, 1999 * Whole document *	1 - 13
Λ	US-5774660 ( Resonate, Inc. ) June 30, 1998 * Whole document *	1 - 13



Further documents are listed in the continuation of Box C.



See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;" document member of the same patent family

Date of the actual completion of the international search

28 MARCH 2001 (28.03.2001)

Date of mailing of the international search report

29 MARCH 2001 (29.03.2001)

Name and mailing address of the ISA/KR

Korean Industrial Property Office  
Government Complex-Taejon, Dunsan-dong, So-ku, Taejon  
Metropolitan City 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

YANG, In Soo

Telephone No. 82-42-481-5782



**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

PCT/KR01/00072

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US-5983005	November 9, 1999	None	
US-5991306	November 23, 1999	None	
US-5774660	June 30, 1998	None	